

What is claimed is;

1. An air-conditioning system for vehicles comprising:

5 a blower / evaporator housing case housing and setting a blower rotated by a motor and creating an air flow and an evaporator connected to a coolant piping through which coolant flows in/out side-by-side along the horizontal direction, wherein:

said blower / evaporator housing case is constituted of two recessed members, which are an upper recessed member and a lower recessed member, separated by a parting line extending along the horizontal direction;

10 an intake unit for selecting the source of air to be taken in is connected to an intake port of said blower at said blower / evaporator housing case; and

an air-conditioning unit having a heater core for implementing outlet temperature control and outlet mode control is connected at a cool air outlet port formed toward the downstream side of said evaporator at said blower / evaporator housing case.

2. An air-conditioning system for vehicles according to claim 1, wherein:

20 said blower / evaporator housing case includes a scroll unit in which said blower is housed ranging on one side from the middle of said blower / evaporator housing case and an evaporator housing unit in which said evaporator is housed ranging on another side from the middle of said blower / evaporator housing case.

3. An air-conditioning system for vehicles according to claim 1, wherein:

an opening at which a fan of said blower is inserted and a drain hole constituting a means for draining condensed water are formed at said lower  
5 recessed member of said blower / evaporator housing case.

4. An air-conditioning system for vehicles according to claim 1, wherein:

said intake port and said cool air outlet port are formed at said upper  
10 recessed member of said blower / evaporator housing case.

5. An air-conditioning system for vehicles according to claim 1, wherein:

edges of said upper recessed member and said lower recessed member  
15 constituting said blower / evaporator housing case include joint portions,  
and a means for locking which locks an expansion valve is formed on said joint portions.

6. An air-conditioning system for vehicles according to claim 5,  
20 wherein:

said means for locking is constituted of semicircular notches for clamping said coolant piping and guard members for covering said expansion valve.

25 7. An air-conditioning system for vehicles according to claim 6,

wherein:

said guard members provided at said upper recessed member and said lower recessed member include projecting pieces formed to support from behind a screw hole metal plate for mounting said expansion valve at said coolant piping with screws, respectively.

8. An air-conditioning system for vehicles according to claim 1, wherein:

said lower recessed member constituting said scroll unit and said evaporator housing unit is connected to an engine compartment partitioning wall via a bridge portion provided thereof.

9. An air-conditioning system for vehicles according to claim 2, wherein:

said lower recessed member constituting said scroll unit and said evaporator housing unit is connected to an engine compartment partitioning wall via a bridge portion provided thereof.

10. An air-conditioning system for vehicles according to claim 2, wherein:

edges of said upper recessed member and said lower recessed member constituting said blower / evaporator housing case include joint portions, and a means for locking which locks an expansion valve is formed on said joint portions.

11. An air-conditioning system for vehicles according to claim 10, wherein:

said means for locking is constituted of semicircular notches for clamping said coolant piping and guard members for covering said expansion valve.

12. An air-conditioning system for vehicles according to claim 11, wherein:

said guard members provided at said upper recessed member and said lower recessed member include projecting pieces formed to support from behind a screw hole metal plate for mounting said expansion valve at said coolant piping with screws, respectively.

13. An air-conditioning system for vehicles according to claim 3, wherein:

edges of said upper recessed member and said lower recessed member constituting said blower / evaporator housing case include joint portions, and a means for locking which locks an expansion valve is formed on said joint portions.

14. An air-conditioning system for vehicles according to claim 13, wherein:

said means for locking is constituted of semicircular notches for clamping said coolant piping and guard members for covering said expansion valve.

15. An air-conditioning system for vehicles according to claim 14,  
wherein:

said guard members provided at said upper recessed member and said  
5 lower recessed member include projecting pieces formed to support from  
behind a screw hole metal plate for mounting said expansion valve at said  
coolant piping with screws, respectively.

16. An air-conditioning system for vehicles according to claim 4,  
10 wherein:

edges of said upper recessed member and said lower recessed member  
constituting said blower / evaporator housing case include joint portions,  
and a means for locking which locks an expansion valve is formed on said  
joint portions.

15 17. An air-conditioning system for vehicles according to claim 16,  
wherein:

said means for locking is constituted of semicircular notches for  
clamping said coolant piping and guard members for covering said  
20 expansion valve.

18. An air-conditioning system for vehicles according to claim 17,  
wherein:

said guard members provided at said upper recessed member and said  
25 lower recessed member include projecting pieces formed to support from

behind a screw hole metal plate for mounting said expansion valve at said coolant piping with screws, respectively.

19. An air-conditioning system for vehicles according to claim 15,  
5 wherein:

said lower recessed member constituting said scroll unit and said evaporator housing unit is connected to an engine compartment partitioning wall via a bridge portion provided thereof.

10 20. An air-conditioning system for vehicles according to claim 18, wherein:

said lower recessed member constituting said scroll unit and said evaporator housing unit is connected to an engine compartment partitioning wall via a bridge portion provided thereof.

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